



Colorado Springs Utilities
Nov. 9, 2005

Energy Supply





Colorado Springs

❖ Utilities

- 0 500 square miles
- 0 500,000 customers
- 0 4 commodities, street lights & associated services
- 0 Citizen owned



Colorado Springs Utilities

❖ Electric

0 830mw summer &
748mw winter demand
(2004)

0 Serve 72% of load

- 2 coal plants
- 4 gas
- 3 hydro

0 4.689 million MWh
(2004)

❖ Natural Gas

0 275,000 MCFD
transportation

0 24,000,000 MCF sales



Outline

- ❖ Current State
- ❖ Our Energy Supply Outlook
- ❖ Current Direction



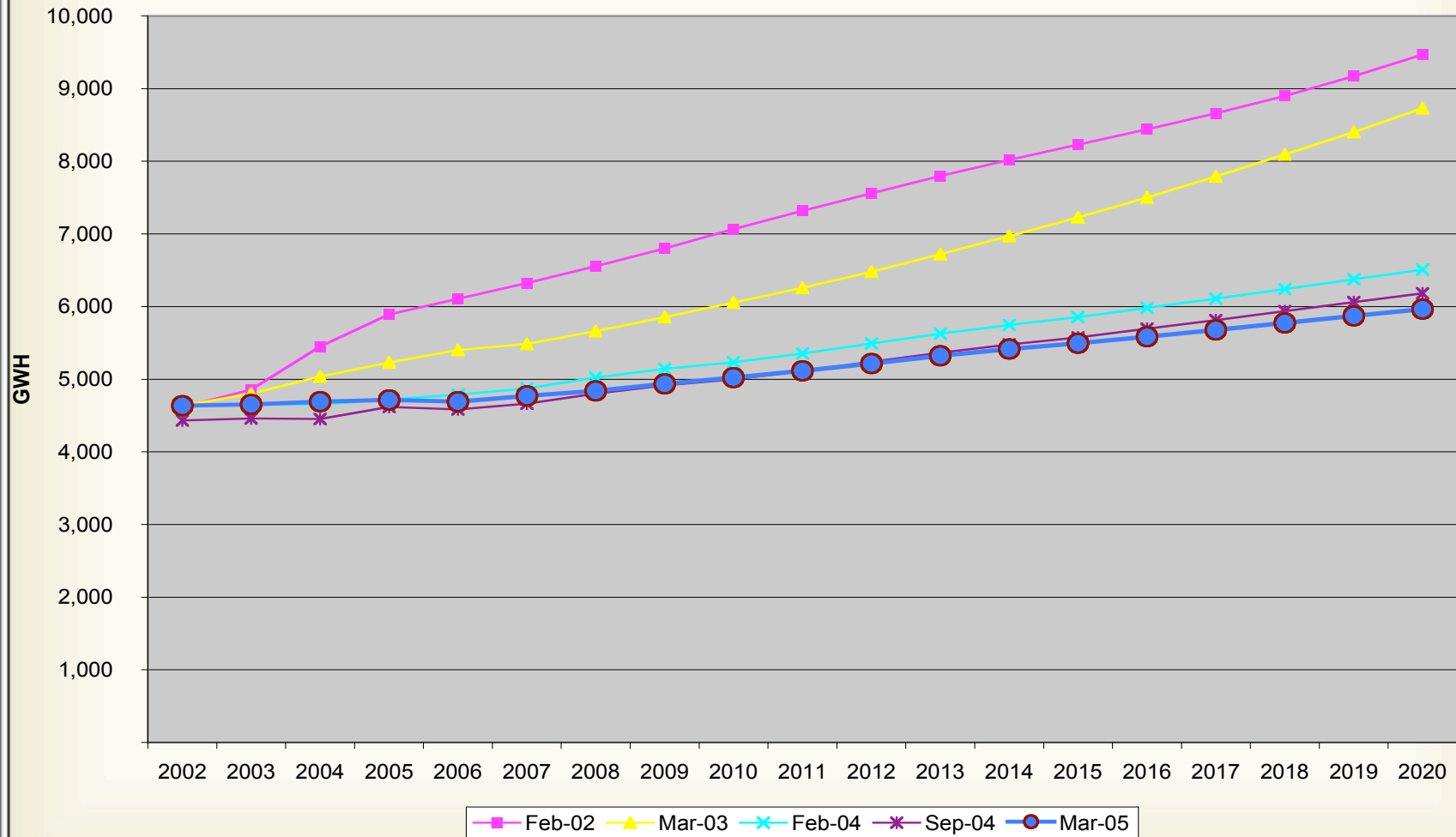
Current State

Volatility on all fronts

- ❖ Electric Load
- ❖ Electric Market
- ❖ Gas Market
- ❖ Coal Market

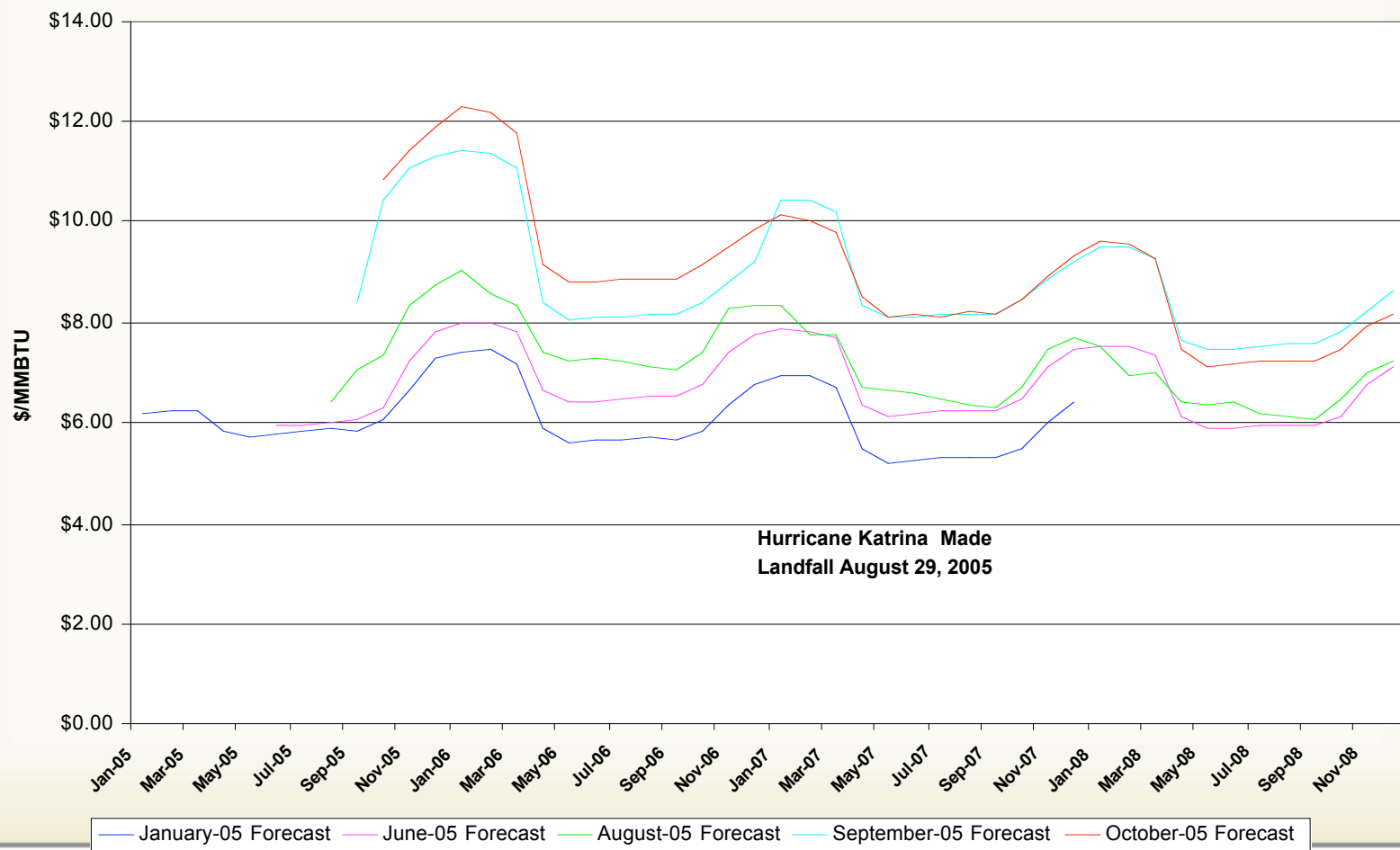


Electric Load Forecast Comparison - Energy



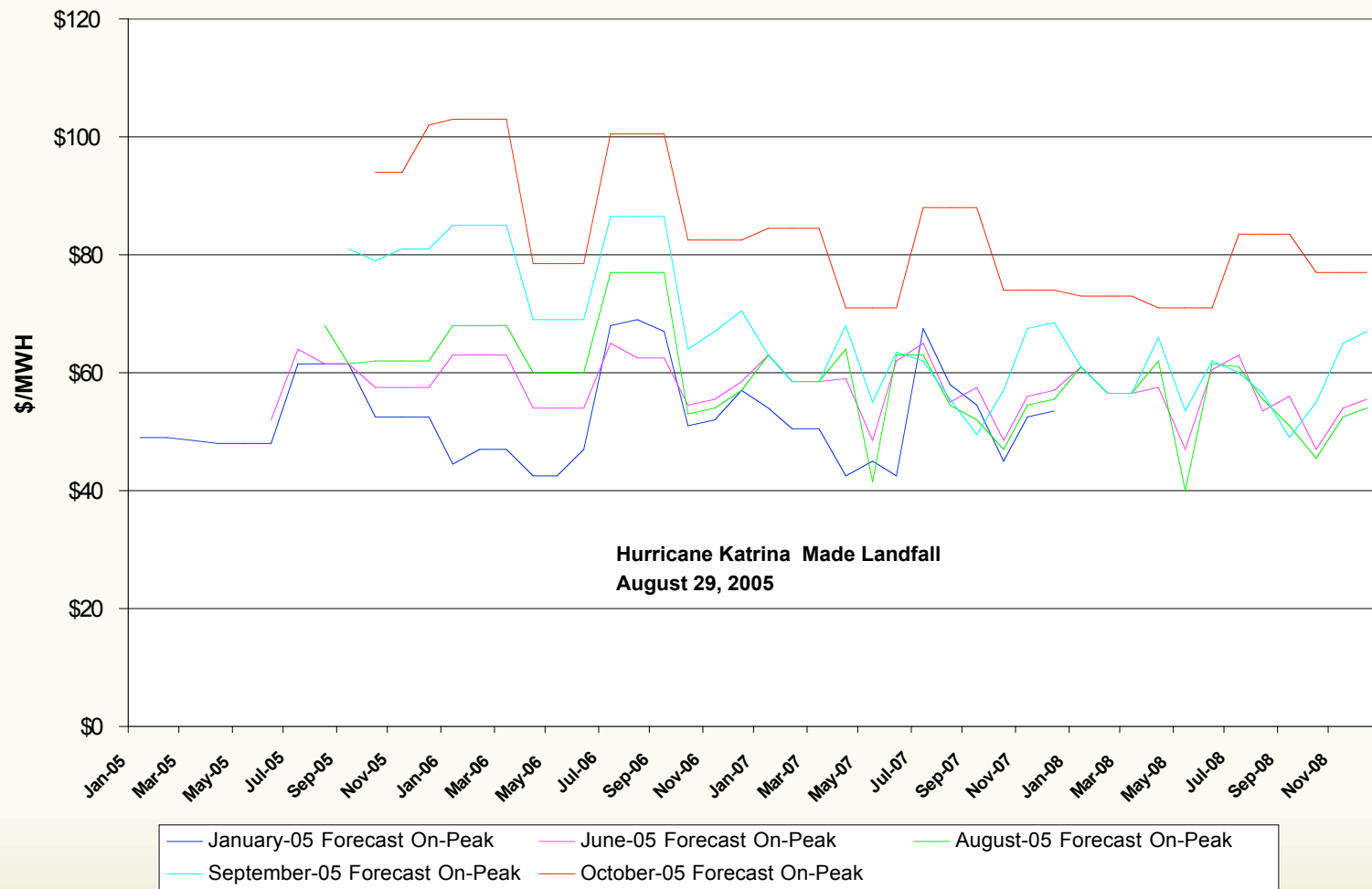


Gas Forward Price Forecasts



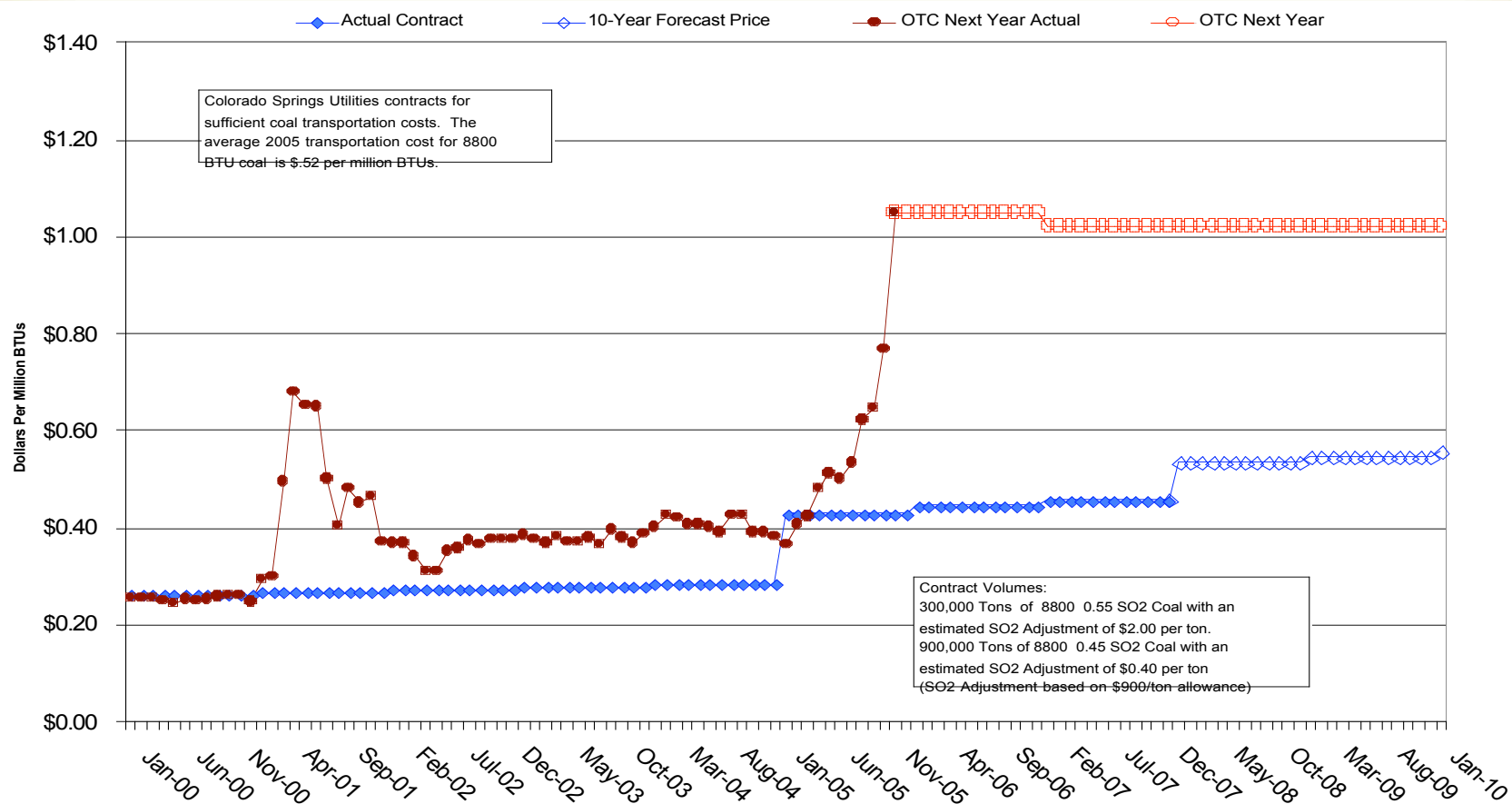


Electric Forward Price Forecasts





Monthly Average Low BTU Coal Market Prices (PRB) 11/08/2005





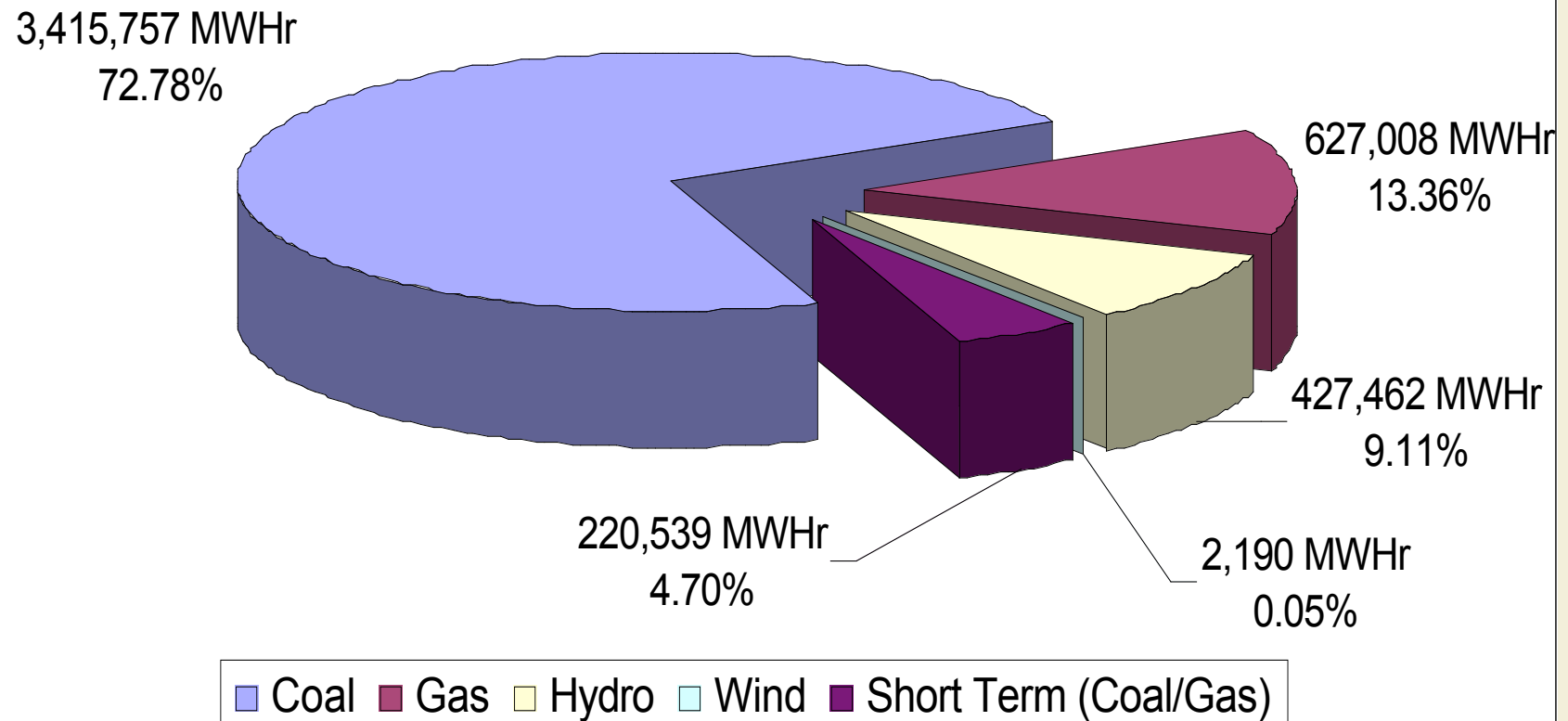
Energy Supply Outlook

- ❖ Springs Utilities Loads and Resources
- ❖ Spring Utilities Energy Mix
- ❖ Springs Utilities EIRP
- ❖ Spring Utilities Renewable Energy



Energy Supply Portfolio Energy Fuel Type

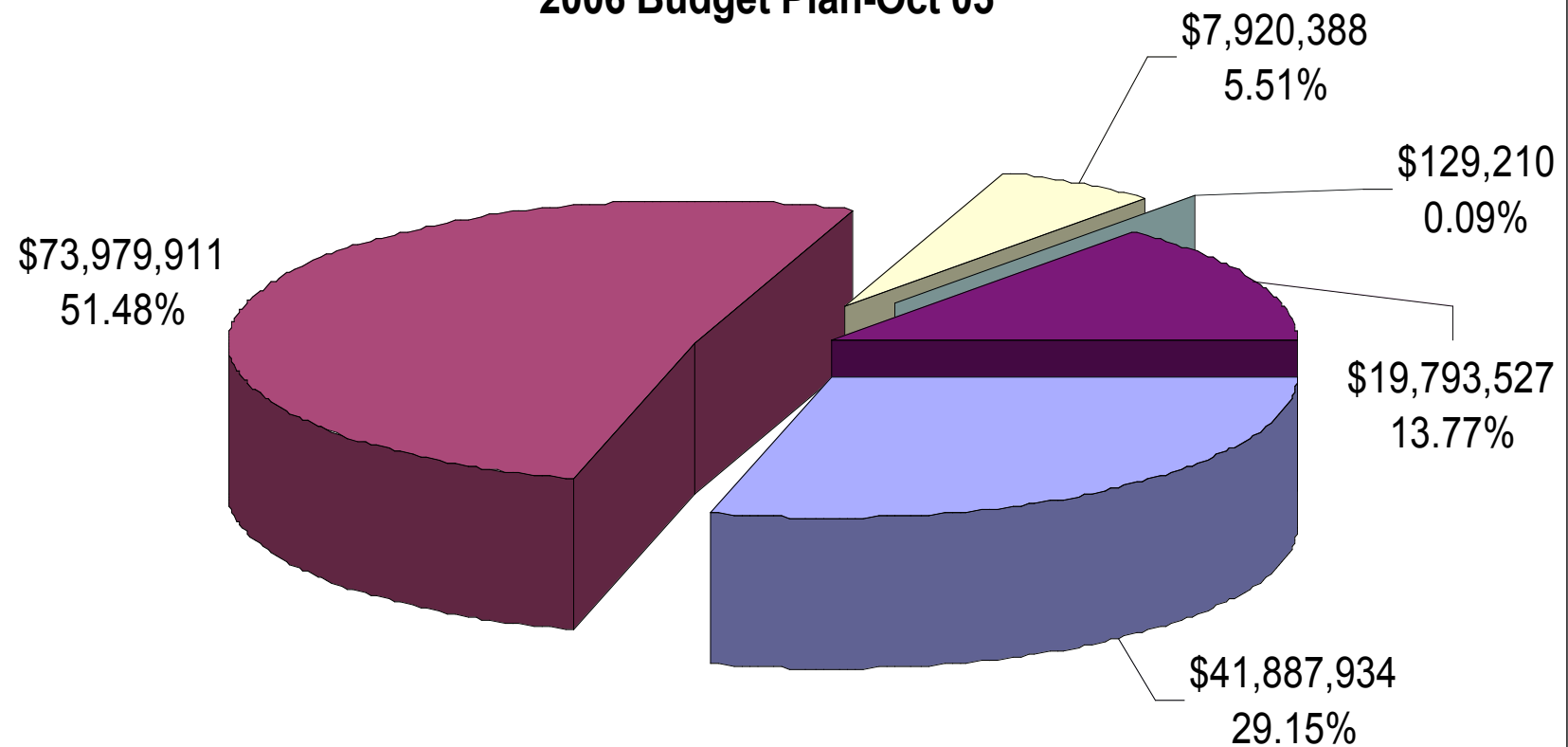
2006 Budget Plan-Oct 05





Energy Supply Portfolio Energy Cost

2006 Budget Plan-Oct 05



"Gas" includes FRPP capacity charge

■ Coal ■ Gas ■ Hydro ■ Wind ■ Short Term (Coal/Gas)



Public Process & Advisory Groups

Transmission

Forecasts

Utilities Board
Policies and Limitations

Supply Side Options

**EIRP
Analysis**

Direction & Recommendations

Conventional | **Renewable Strategy**
Coal, Gas, etc. | Hydro, Wind, Solar, etc.

Existing & New:
•Supply Side Resources
•Demand Side Programs
•Legislative Agenda
•Short & Long Term Budgets
•Rate Structure

Influencing Customers' Consumption thru DSM

Environmental & Reliability Requirements

- Education
- Efficiency
- Regulation

- Load shaping
- Rate Structure
- Economic Development

- Customer Priorities
1. Cost
 2. Reliability
 3. Environmental



Renewable Update

- ❖ Achieve a balance among cost, reliability and environmental stewardship
- ❖ Leveraging our four service utility infrastructure and operation
 - 0 Active Projects in design and construction
 - Manitou 3 Hydro 2005 (560 kW)
 - Cascade Hydro 2006 (900 kW)
 - 0 2005 / 2006 active engineering and economic studies
 - Biogas - Byproduct of Waste Treatment
 1. Cogeneration at Clear Springs Ranch (1500 kW)
 2. Processing into pipeline quality gas – credit exchange strategy
 - Wind
 - Clear Springs Ranch wind study in progress (5 MW – 30 MW)
 - Complementary to load demand profiles
 - “OUR” wind source - high visibility to community
 - Hydro
 - Pine Valley 2007 (1300kW)
 - Northfield 2008 (1100 kW)
 - Biomass—Forest Residue
 1. Co-fired (10 MW)
 2. Stand-alone (6 MW)
- ❖ Other Options (planned 2006 feasibility and economic study)
 - 0 Wind
 - Power Purchase Contracts
 - 0 Renewable Energy Credits
- ❖ Demand Side Management



Current Direction

- ❖ Committed to Renewable
 - 0 Comply with Amendment 37
 - 0 Continue to evaluate all options for compliance
 - 0 Continually review compliance issues
- ❖ Update EIRP
 - 0 Engage Technical Advisory Group (TAG) and Content Advisory Group (CAG)
 - 0 Integrate RPS requirements into plan
 - 0 More exactly quantify and evaluate supply options' costs
 - Commodity and Integration
 - 0 Integrate transmission constraints / opportunities into plan
- ❖ Continue execution of 2004 Action Plan
 - 0 Complete studies / evaluation of renewable alternatives
 - Integrate results into EIRP